

TABLE 148.120B—SEGREGATION BETWEEN BULK SOLID CARGOES AND INCOMPATIBLE PACKAGED CARGOES

Packaged hazardous material	Bulk solid material								
	Class	4.1	4.2	4.3	5.1	6.1	7	8	9/PDM
Explosives	1.1	4	4	4	4	2	2	4	X
	1.2								
	1.5								
Explosives	1.3	3	3	4	4	2	2	2	X
	1.6								
Explosives	1.4	2	2	2	2	X	2	2	X
Flammable gas	2.1	2	2	1	2	X	2	2	X
Non-flammable compressed gas	2.2	2	2	X	X	X	2	1	X
Poisonous gas	2.3	2	2	X	X	X	2	1	X
Flammable liquid	3	2	2	2	2	X	2	1	X
Flammable solid	4.1	X	1	X	1	X	2	1	X
Spontaneously combustible material	4.2	1	X	1	2	1	2	1	X
Dangerous when wet material	4.3	X	1	X	2	X	2	1	X
Oxidizer	5.1	1	2	2	X	1	1	2	X
Organic peroxide	5.2	2	2	2	2	1	2	2	X
Poisonous material	6.1	X	1	X	1	X	X	X	X
Infectious substance	6.2	3	3	2	3	1	3	3	X
Radioactive material	7	2	2	2	1	X	X	2	X
Corrosive material	8	1	1	1	2	X	2	X	X
Miscellaneous hazardous material	9	X	X	X	X	X	X	X	X

Numbers and symbols indicate the following terms as defined in § 148.3 of this part:

1—"Away from".

2—"Separated from".

3—"Separated by a complete hold or compartment from".

4—"Separated longitudinally by an intervening complete compartment or hold from".

X—No segregation required, except as specified in an applicable section of this subpart or Subpart E of this part.

§ 148.125 Stowage and segregation for materials of Class 4.1.

(a) Class 4.1 materials listed in Table 148.10 of this part must—

(1) Be kept as cool and dry as practical before loading;

(2) Not be loaded or transferred between vessels during periods of rain or snow;

(3) Be stowed separated from foodstuffs; and

(4) Be stowed clear of sources of heat and ignition and protected from sparks and open flame.

(b) Bulkheads between a hold containing a Class 4.1 material and incompatible materials must have cable and conduit penetrations sealed against the passage of gas and vapor.

§ 148.130 Stowage and segregation for materials of Class 4.2.

(a) Class 4.2 materials listed in Table 148.10 of this part must—

(1) Be kept as cool and dry as practical before loading;

(2) Not be loaded or transferred between vessels during periods of rain or snow;

(3) Be stowed clear of sources of heat and ignition and protected from sparks and open flame; and

(4) Except for copra and seed cake, be stowed separate from foodstuffs.

(b) The bulkhead between a hold containing a Class 4.2 material and a hold containing a material not permitted to mix with Class 4.2 materials must have cable and conduit penetrations sealed against the passage of gas and vapor.

§ 148.135 Stowage and segregation for materials of Class 4.3.

(a) Class 4.3 materials listed in Table 148.10 of this part which, in contact with water, emit flammable gases, must—

(1) Be kept as cool and dry as practical before loading;

(2) Not be loaded or transferred between vessels during periods of rain or snow;

(3) Be stowed separate from foodstuffs and all Class 8 liquids; and

(4) Be stowed in a mechanically ventilated hold. Exhaust gases must not penetrate into accommodation, work or control spaces. Unmanned barges that have adequate natural ventilation need not have mechanical ventilation.

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(b) The bulkhead between a hold containing a Class 4.3 material and incompatible materials must have cable and conduit penetrations sealed against the passage of gas and vapor.

§ 148.140 Stowage and segregation for materials of Class 5.1.

(a) Class 5.1 materials listed in Table 148.10 of this part must—

(1) Be kept as cool and dry as practical before loading;

(2) Be stowed away from all sources of heat or ignition; and

(3) Be stowed separate from foodstuffs and all readily combustible materials.

(b) Special care must be taken to ensure that holds containing Class 5.1 materials are clean and, whenever practical, only noncombustible securing and protecting materials are used.

(c) Class 5.1 materials must be prevented from entering bilges or other cargo holds.

§ 148.145 Stowage and segregation for materials of Class 7.

(a) Class 7 material listed in Table 148.10 of this part must be stowed—

(1) Separate from foodstuffs; and

(2) In a hold or barge closed or covered to prevent dispersal of the material during transportation.

(b) [Reserved]

§ 148.150 Stowage and segregation for materials of Class 9.

(a) A bulk solid cargo of Class 9 material (miscellaneous hazardous material) listed in Table 148.10 of this part must be stowed and segregated as required by this section.

(b) Ammonium nitrate fertilizer of Class 9 must be segregated as required for Class 5.1 materials in §§148.120 and 148.140 of this part and must be stowed—

(1) Separated by a complete hold or compartment from readily combustible materials, chlorates, hypochlorites, nitrites, permanganates, and fibrous materials (*e.g.*, cotton, jute, sisal, *etc.*);

(2) Clear of all sources of heat, including insulated piping; and

(3) Out of direct contact with metal engine-room boundaries.

(c) Castor beans must be stowed separate from foodstuffs and Class 5.1 materials.

(d) Fish meal must be stowed and segregated as required for Class 4.2 materials in §§148.120 and 148.130 of this part. In addition, its temperature at loading must not exceed 35 °C (95 °F), or 5 °C (9 °F) above ambient temperature, whichever is higher.

(e) Sulfur must be stowed and segregated as required under §§148.120 and 148.125 of this part for a material of Class 4.1.

§ 148.155 Stowage and segregation for potentially dangerous materials.

(a) A PDM must be stowed and segregated according to the requirements of this section and Table 148.155 of this section.

(b) When transporting coal—

(1) Coal must be stowed separate from materials of Class/division 1.4 and Classes 2, 3, 4, and 5 in packaged form; and separated from bulk solid materials of Classes 4 and 5.1;

(2) No material of Class 5.1, in either packaged or bulk solid form, may be stowed above or below a cargo of coal; and

(3) Coal must be separated longitudinally by an intervening complete cargo compartment or hold from materials of Class 1 other than Class/division 1.4.

(c) When transporting direct reduced iron (DRI)—

(1) DRI lumps, pellets, or cold-molded briquettes, and DRI hot-molded briquettes, must be separated from materials of Class/division 1.4, Classes 2, 3, 4, 5, Class 8 acids in packaged form, and bulk solid materials of Classes 4 and 5.1; and

(2) No material of Class 1, other than Class/division 1.4, may be transported on the same vessel with DRI.

(d) Petroleum coke, calcined or uncalcined, must be—

(1) Separated longitudinally by an intervening complete cargo compartment or hold from materials of Class/divisions 1.1 and 1.5; and

(2) Separated by a complete cargo compartment or hold from all hazardous materials and other potentially dangerous materials in packaged and bulk solid form.